

ABSTRACT

Techniques for detecting received sequences when certain signaling characteristics (e.g., transport formats, rates) are not known *a priori* at the receiver. In one method, a sequence for a transmitted message is received, and a metric value is computed for each of a number of hypothesized messages corresponding to a number of hypotheses for the unknown signaling characteristic of the transmitted message. The metric value is computed based on a MAP metric derived to approximately maximize a joint *a posteriori* probability between the received sequence and the hypothesized messages. The hypothesized message having the best metric value is selected as the transmitted message. The specific form of the MAP metric is dependent on the particular signaling scheme used to map the message to its corresponding sequence, and may be used for blind transport format detection (BTFD) in a W-CDMA system and blind rate detection in an IS-95 CDMA system.